Compendium of Proposals to Improve the CBM Mechanism

Filippa Lentzos and R. Alexander Hamilton
BIOS Centre, London School of Economics (LSE)

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Key findings

Since the current Confidence Building Measures (CBMs) were introduced in 1991, a number of proposals have been made to improve the CBM mechanism. These proposals seek to:

1. Review the questions asked on the CBM forms, ensuring that they are clear, relevant and contribute to enhancing transparency and building trust between States Parties;

2. Improve the format of the CBM forms, making their completion more intuitive and user-friendly, while also addressing the need to make CBMs available in a wider number of languages, ensuring universal accessibility;

3. Modernise the reporting process, making greater use of electronic CBM forms and online resources, moving towards a comprehensive web-based information management system that is accessible to all States Parties;

4. Improve national data collection processes, encouraging improved collator rotation through handover notes, and offering guidelines, completed CBM forms, data collection and collation workshops and one-to-one assistance;

5. Strengthen the role of the Implementation Support Unit (ISU), moving towards an administrative office that will have the appropriate authority and the resources to facilitate the implementation of the CBM mechanism;

6. Promote cooperation between States Parties, encouraging bilateral and multilateral dialogue, allowing States Parties, which are in a position to do so, to assist other States Parties struggling to fulfill their CBM obligations;

7. Invite civil society groups and international organisations to play a role in the CBM information exchange, drawing on their expertise and energy to help address problems with the CBM mechanism and seek possible solutions.

In the lead-up to the Seventh Review Conference in 2011, it is hoped that this compendium of proposals to date will help States Parties and experts engage in meaningful and productive debate concerning the future of the CBMs.

Table of Contents

Proposals to improve the CBM mechanism

The aim of the CBM mechanism is to:

> strengthen the authority of the Convention and to enhance confidence in the implementation of its provisions… in order to prevent or reduce the occurrence of ambiguities, doubts and suspicions, and in order to improve international co-operation in the field of peaceful bacteriological (biological) activities.

The CBMs were launched at the Second Review Conference in 1986; procedures for the annual exchange of data were developed at the 1987 Ad Hoc Group Meeting of Scientific and Technical Experts; and were modified and expanded at the Third Review Conference in 1991. Since this time, the mechanism and forms (A-G) have gone unchanged.

Many States Parties have emphasized a need to review the CBM mechanism and consider proposals to improve its deficiencies. The introduction of the Implementation Support Unit (ISU), agreed at the Sixth Review Conference in 2006, signalled a commitment by States Parties to strengthen the mechanism, as the ISU is explicitly tasked with administering the CBM process. Although the introduction of the ISU represents a significant step forward, there remains considerable scope for further improvement.

A number of proposals and recommendations have been made over the last two decades by States Parties, experts, civil society groups and others to improve the CBM mechanism. These proposals and recommendations include calls to:

1. Review the questions asked on the CBM forms;
2. Improve the usability of the CBM forms;
3. Modernise the reporting process;
4. Improve national data collection processes;
5. Make administrative improvements;
6. Promote cooperation between States Parties; and
7. Invite civil society groups and international organisations to play a role in the CBM process.

This compendium provides a comprehensive review of these proposals and recommendations to support States Parties and experts to engage in informed and productive debate about the future of CBMs.

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1. Review the questions asked on the CBM forms

A number of actors have suggested that the questions asked on the CBM forms should be reviewed and amended to address any perceived difficulties, ambiguities or gaps. It is believed that by making the questions asked on the CBM forms clearer and more relevant, more States Parties will participate in the CBM process and the information provided in the CBM submissions will be more accurate and consistent.

Proposals to improve the quality of the questions asked on the CBM forms typically suggest implementing one or more of the following changes: (1) clarify an existing question or form; (2) add an additional question or form; (3) remove an existing question or form.

Although a number of modifications have been proposed, many actors seem to agree that the current forms cannot easily be 'slimmed down' and still retain their descriptive value; nor can they be substantially 'bulked up', as more lengthy or intrusive questions could potentially deter States Parties from participating in the CBM process. With this in mind, proposals tend towards subtle modifications, recommending improved clarity and precision over sweeping reform.

Form 0: Declaration form on 'Nothing to Declare' or 'Nothing New to Declare' for use in the information exchange

Form 0 is intended to simplify the reporting process, allowing States Parties to indicate upfront whether they have (a) 'nothing to declare' or (b) 'nothing new to declare' for each CBM measure.

In practice, however, States Parties have found the wording of Form 0 confusing, resulting in incomplete and/or inaccurate submissions. Moreover, as the preliminary declaration can permit States Parties to provide no information (i.e. 'nothing to declare' or 'nothing new to declare' boxes are ticked for each measure), ambiguities in this form are particularly damaging to the outcome of the CBM process. Table 1 outlines proposals to redesign and clarify this form.

Proposed by	Proposed modifications
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Clarify 'nothing to declare' or 'nothing new to declare' • Redesign format along similar lines as the following: Does your country have anything to declare this year on Measure A, part I? (a) Yes, it has something to declare in this form for the first time (please complete form); (b) Yes, it has previously declared something in this form, and needs to update or modify details (please complete form); (c) Yes, but this information has already been declared since [year] and has not changed; (no need to complete form); (d) No, it has nothing at all to declare on this form • Repeat these four questions for each of the forms (A-G)
Research Group for Biological Arms Control (RGBAC), Isla, Occasional Paper No.3, March 2007	• Change title to read: 'Exchange of general information and overview of submitted data' • Redesign format along similar lines as the following: (a) Yes, a declaration is made and is the only valid information for this topic; (b) No, a declaration is not made, information submitted in the year 'x' remains valid; (c) No, there is nothing to declare • Request date of entry into force of the Convention • Request national CBM contact point • Request information on presence of national biological defence programme • Include relevant section of Form 0 at the start of each subsequent form

Table 1: Proposed modifications to Form 0

Form A1: Exchange of data on research centres and laboratories

Form A1 requests that States Parties exchange information on "research centres and laboratories that meet very high national or international safety standards" or "specialize in permitted biological activities directly related to the Convention".

Due to the dual-use potential of high containment laboratories, Form A1 is considered particularly important to establishing transparency and building trust between States Parties. In order to enhance the effectiveness of Form A1, a number of proposals have been made to explicitly clarify its wording, particularly with regard to 'directly related to the Convention', and to focus questions on maximum containment laboratories. Table 2 outlines proposals that seek to achieve these aims.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.10, ed. Geissler, 1990	• Define 'directly related to the Convention' • Change wording to include facilities which are not 'specialized' but which are 'involved in' activities that are directly related to the Convention • Provide an opportunity to state that 'there are no, or no further, research centres or laboratories within or outside the territory of the reporting State Party' • Request that States Parties declare where protective encapsulating suits are being used with Risk Group III and IV biological agents and toxins • Request States Parties declare where research with specific organisms is being carried out in biosafety level 2 (BSL2) facilities
The USSR BWC/CONF.III/17 24 September 1991	• Request information on laboratory safety rules in force at the facility, including those with vaccinations, observation and quarantines
Hungary BWC/CONF.III/17 24 September 1991	• Request information on equipment and materials used in declared facilities
The Netherlands BWC/AD HOC GROUP/6 29 June 1995	• Make this form mandatory within legally binding instrument
Hunger, Key Points for Fourth Review Conference, September 1996	• Clarify need to include information on all facilities with maximum containment laboratories • Omit 'research' from the title and insert 'including research facilities' at the end of the title
South Africa BWC/CONF.V/COW/WP.1 16 November 2001	• Request information on high security facilities that handle and work with Group IV animal pathogens • As a basis for consideration, South Africa has prepared an amended text describing the modalities for CBM A
RGBAC, Isla, Occasional Paper No.3, March 2007	• Limit form to maximum containment research facilities • Request publication list and information on publication policy for declared facility
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Clarify need to include BSL4 laboratories, while not restricting States Parties from including other laboratories that meet very high safety standards

Table 2: Proposed modifications to Form A1

Form A2: Exchange of information on national biological defence research and development programmes

Form A2 is critical to the success of the information exchange, as this form requires that States Parties provide a detailed account of biodefence activities, staffing, infrastructure, funding, related publications and publication policies.

Although Form A2 has been commended for its semi-open question format, which allows States Parties to elaborate on their biodefence programmes, a number of proposals have been made to broaden its scope and to make the questions asked more relevant. This would allow States Parties to explore at greater length the most significant issues to the BWC. Table 3 outlines proposals that seek to achieve these aims.

Proposed by	Proposed modifications
Hungary BWC/CONF.III/17 24 September 1991	• Request that States Parties declare whether or not training of defence against biological warfare is practised in the armed forces and encourage exchange visits to observe biodefence exercises • Encourage direct communication between facilities (e.g. request telephone and fax numbers of facilities declared in national report)
The Netherlands BWC/AD HOC GROUP/6 29 June 1995	• Make this form mandatory within legally binding instrument
Hunger, Key Points for Fourth Review Conference, September 1996	• Broaden the focus of Form A2 to include all aspects of biodefence programme • Omit 'research and development' from the title and insert 'including research programmes' at the end of the title
Hunger and Isla, HCBAC, Disarmament Forum No.3, 2006	• Form A2 (iii) is confusing and needs to be amended • Unclear whether the total number of personnel working at biodefence facility should include or exclude the number of contractor staff
RGBAC, Isla, Occasional Paper No.3, March 2007	• Change title to read: 'Exchange of information on national biological defence programmes' • Move Form A2 (i) to Form 0 • Clarify declaration requirement for Form A2 (iii) requiring any facility with more than 50% of its total finances devoted to biodefence to be declared • List all other facilities involved in biodefence programmes in Form A2 (ii) • Expand Form A2 (iii) paragraphs (viii) and (ix) to include not only publications but all forms of research results • Request information on the promotion of contacts between scientists such as conferences, symposia and seminars organised at declared facility • Add Form A2 (iv) requesting information on military vaccination programmes, military biodefence training exercises and any other relevant information
Pugwash Study Group, Hart, Discussion Paper, November 2008	• Develop guidelines for describing the level of funding and general type of activity in biodefence relevant activities
Lentzos, Preparing the Ground for the CBM Content Debate, Swiss-Funded Study, December 2008	• Add reference points to existing questions, including: proportion of defence budget spent on biodefence rather than biodefence figure alone; distribution of scientists according to disciplines rather than disciplines represented; number of facilities dealing with highly dangerous pathogens and number of personnel involved rather than the square-meters of BSL2, BSL3 and BSL4 laboratories • Add new questions, including: whether aerosol testing is carried out; number and species of animals used in biodefence research per year; proportion of open source to internal/restricted publications at facility

Table 3: Proposed modifications to Form A2

Form B: Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins

Form B requests that States Parties provide information on disease outbreaks that "deviate from the normal pattern as regards type, development, place, or time of occurrence".

Although potentially a very useful form, as an unusual disease outbreak could point to an intentional or unintentional biosecurity breach, Form B has been criticized for focusing exclusively on human diseases; providing insufficient information on the specific biological agents and diseases of interest to the BWC; and for overlapping with the mandate of the World Health Organization (WHO). These deficiencies are further complicated by the fact that the information submitted in Form B tends to be inaccurate and incomplete. Table 4 outlines proposals to improve this form.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.10, ed. Geissler, 1990	• List groups of biological and toxin agents that must be taken into account when reporting on facilities and outbreaks • Request information regarding vector research, unusual vector occurrences, and the occurrence of vectors harbouring Risk Group III and IV agents • Include toxins more specifically in modalities
SIPRI Chemical and Biological Warfare Studies No.12, ed. Lundin, 1991	• Request information on infectious animal and plant pathogen research and unusual outbreaks of animal and plant diseases caused by pathogens/toxins • Request information on vector research and unusual vector occurrences
The USSR BWC/CONF.III/17 24 September 1991	• Discontinue the exchange of information on unusual outbreaks of infectious disease, this data is already presented by each State Party to the WHO
Hunger, Key Points for Fourth Review Conference, September 1996	• Remove Form B, eliminating unnecessary duplication in reporting outbreaks, while encouraging States Parties to continue to make declarations of disease outbreaks to the WHO, the World Organization for Animal Health (OIE) and the Food and Agriculture Organization (FAO) • Clarify diseases to be declared and what features make an outbreak 'unusual'
The European Union BWC/CONF.V/COW/1 13 December 2001	• Request information on outbreaks of contagious animal and plant pathogens
RGBAC, Isla, Occasional Paper No.3, March 2007	• Remove Form B or expand it to include information on animal and plant diseases
RGBAC, Zmorzynska, Occasional Paper No.4, December 2007	• Remove possibility of ticking 'nothing to declare' or 'nothing new to declare' in Form 0, as there is always something to declare, be it the presence or absence of a disease • Require a new declaration each year • List specific human, animal and plant diseases for which information must be provided, while not restricting States Parties from reporting other diseases • If no case numbers are provided, request why this is the case • Request information on events of biosecurity concern, such as accidents in biodefence laboratories and incidents with weaponised biological material • As basis for consideration, the RGBAC has prepared an amended Form B
RGBAC, Statement to States Parties, December 2007	• Limit Form B to serious biosecurity related events such as bioweapons attacks and biodefence laboratory accidents • Use the WHO for routine disease data collection

Table 4: Proposed modifications to Form B

Form C: Encouragement of publication of results and promotion of use of knowledge

Form C encourages States Parties to make the results of research in the life sciences, particularly research that is directly related to the Convention, unclassified and requests that States Parties provide information on relevant publications and publication policies.

Form C, as a means of promoting the open exchange of knowledge between States Parties, has the potential to be a highly valuable tool. The form, however, has been criticized for being impractical and lacking focus. It is often considered unfeasible for a State Party to provide an exhaustive list of publications and the information contained in many publications lacks relevance to the Convention. Table 5 outlines proposals that seek to address these deficiencies.

Proposed by	Proposed modifications
Hunger, Key Points for Fourth Review Conference, September 1996	• Limit scope to publications produced as a result of defence-funded work (including both work carried out at Ministry of Defence facilities and carried out under contract in academic and industrial facilities) • As a basis for consideration, Hunger has prepared a redesigned Form C
Chevrier and Hunger, Nonproliferation Review Vol.7 No.3, 2000	• Make surveillance of publications the responsibility of the BWC and not an obligation for States Parties • Invest in sufficient staff within the BWC to survey publications through publicly available sources
The European Union BWC/CONF.V/COW/1 13 December 2001	• Make form more focused and effective
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Make a clear distinction between 'publications' and 'policy regarding publication', requesting 'publications of research centres and laboratories covering area of CBMs' and 'policy regarding the publication of results of biological research'
Hunger and Isla, HCBAC, Disarmament Forum No.3, 2006	• Limit publication lists to works of particular relevance to the Convention
RGBAC, Isla, Occasional Paper No.3, March 2007	• Remove Form C and request publication list and information on publication policy for declared facility in Form A1 and Form A2 (iii) instead • If the aim is to provide an indication of activities carried out at a facility, request other forms of research such as presentations, seminar papers, posters, patents and any other product coming out of relevant activities
Lentzos and Woodward, National Data Collection Processes for Submissions, Swiss-Funded Study, December 2007	• States Parties cannot be expected to list all publications

Table 5: Proposed modifications to Form C

Form D: Active promotion of contacts

Form D requests that States Parties provide information on planned international conferences, seminars, symposia and other opportunities for mutual exchange and collaboration between researchers in the life sciences.

As part of the overall aim of the CBMs, cooperation between researchers goes a long way towards building trust between States Parties through shared research experiences. There is some concern, however, that the effectiveness of this measure is diminished by the fact that States Parties receive insufficient advance notice of upcoming events; there is some confusion regarding whom to contact regarding opportunities for exchange; and there should be a stronger focus on defence-funded projects. Table 6 outlines proposals that seek to make Form D more explicit in regard to this information.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.10, ed. Geissler, 1990	• Request information on planned defence-funded conferences and meetings
Hunger, Key Points for the Fourth Review Conference, September 1996	• Request that States Parties provide advance notice on conferences and related scientific contacts • Encourage them to provide an address for obtaining further information and for applying to participate
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Include two headings: 'past seminars' and 'planned seminars'
RGBAC, Isla, Occasional Paper No.3, March 2007	• Remove Form D and request information on past events in Form A2 (iii) instead • Encourage States Parties to inform the United Nations Department of Disarmament Affairs (DDA) about relevant planned events • Encourage the DDA to publicise upcoming events on its website

Table 6: Proposed modifications to Form D

Form E: Declaration of legislation, regulations and other measures

Form E requests that States Parties provide information on legislation, regulations and other steps that their countries have taken to implement the BWC.

This form is considered critical to the success of the CBM regime as it provides States Parties with an opportunity to describe concrete actions taken to stop the development, production, stockpiling, acquisition and general misuse of infectious biological agents and toxins. Form E, however, is believed by many to be incomplete and in need of updating to include information on dual-use equipment and knowledge, codes of conduct, health and safety measures and bioterrorism prevention. Table 7 outlines proposals to expand Form E to include this information.

Proposed by	Proposed modifications
The European Union BWC/CONF.V/COW/1 13 December 2001	• Request information on transfer of microorganisms and toxins and related legislation, regulation and procedures, as well as transfer of dual-use equipment, health and safety issues and penal legislation
Pugwash Study Group, Roffey, Discussion Paper, December 2004	• Summarize situation concerning national implementation measures and propose further measures as appropriate
The United States BWC/CONF.VI/3 6 December 2006	• Request that States Parties include information regarding efforts to adopt national legislation within their CBM declarations • Request that States Parties adopt and enforce appropriate, effective laws and measures, such as export and border controls, to prevent non-state actors from acquiring and manufacturing WMD or related materials
Hunger and Isla, HCBAC, Disarmament Forum No.3, 2006	• Add a question on bioterrorism
RGBAC, Isla, Occasional Paper No.3, March 2007	• Expand Form E to cover measures aimed at preventing bioterrorism and the adoption and use of codes of conduct for life scientists • Expand declaration requirement on export and import measures to cover not only microorganisms and toxins, but also equipment and knowledge

Table 7: Proposed modifications to Form E

Form F: Declaration of past activities in offensive and/or defensive biological research and development programmes

Form F requests that States Parties declare when they entered the Convention and declare information regarding past bioweapons and/or biodefense programmes.

The importance of this measure, as a means of establishing transparency between States Parties, has motivated proposals to make Form D more comprehensive, requesting more specific information from States Parties and encouraging more frequent and more open discussion on past offensive/defensive activities. States Parties that are known to have had programmes, but who have not yet declared them, are encouraged to do so. States Parties that have made declarations are encouraged to update this information on a regular basis. Table 8 provides a summary of these proposals.

Proposed by	Proposed modifications
The Netherlands BWC/AD HOC GROUP/6 29 June 1995	• Make this form mandatory within legally binding instrument
Hunger, Key Points for Fourth Review Conference, September 1996	• Broaden scope of Form F to include all aspects of past national bioweapons and/or biodefence programmes
HCBAC, Isla, Occasional Paper No.1, June 2006	• Encourage countries who are known to have had offensive programmes, yet have not declared them, to do so • Maintain open answer format to encourage countries to provide any and all relevant information • Provide specific points of interest to ensure comprehensive disclosure of past activities • Encourage regular discussion on past activities and create a suitable forum for such discussion to occur
Hunger and Isla, HCBAC, Disarmament Forum No.3, 2006	• Introduce more detailed questions on categories of activities undertaken and on agents and facilities
RGBAC, Isla, Occasional Paper No. 3, March 2007	• Change title to read: 'Declaration of past activities in offensive and/or defensive biological weapons programmes' • Move question on entry into force of the Convention to Form 0 • Request more specific information on facilities, activities, organisms and military doctrine • Make updates obligatory at least every five years
Pugwash Study Group, Hart, Discussion Paper, November 2008	• Clarify past defensive and offensive biological weapons programmes (perhaps partly through the tabling of national papers that reflect additional archival research from a suitably distant period, such as prior to 1 January 1946 and the end of the Cold War could be another, eventual 'end point' cut-off date)

Table 8: Proposed modifications to Form F

Form G: Declaration of vaccine production facilities

Form G requests that States Parties provide information on human vaccine production facilities, including the name of the facility, its address and a general description of the diseases that are vaccinated against at the facility.

Form G has been criticized for being incomplete due to the fact that animal vaccine facilities, as well as facilities that produce biocontrol agents and plant inoculants, use much of the same equipment and technology and many of the same processes as human vaccine production facilities. This gap in Form G has motivated proposals to broaden the form to include questions that request this missing information. Table 9 provides a summary of these proposals.

Proposed by	Proposed modifications
Finland BWC/CONF.III/17 24 September 1991	• Request information on all facilities producing vaccines against toxins and/or pathogenic microorganisms whether for human or animal use, excluding very small production (e.g. production under 10,000 doses)
Canada BWC/CONF.III/17 24 September 1991	• Request information on all institutions, both civil and governmental, producing vaccines for the protection of humans and animals
The Netherlands BWC/AD HOC GROUP/6 29 June 1995	• Make this form mandatory within a legally binding instrument
Hunger, Key Points for Fourth Review Conference, September 1996	• Request information on animal vaccine production facilities • Broaden required information to include all licensed and non-licensed vaccine production facilities
South Africa BWC/CONF.V/COW/WP.1 16 November 2001	• Request information on animal vaccine production facilities • As a basis for consideration, South Africa has prepared an amended text describing the modalities for CBM G
RGBAC, Isla, Occasional Paper No.3, March 2007	• Change title to read: 'Declaration of facilities producing human vaccines, animal vaccines, biocontrol agents and plant inoculants' • Expand form to cover animal vaccine production facilities and facilities producing biocontrol agents and plant inoculants

Table 9: Proposed modifications to Form G

'Form H': New forms

A number of proposals have been made to add new forms that would extend the present requirements of CBMs. These forms (provisionally referred to as 'Form H') would provide room to address new and evolving issues that could further enhance transparency and build trust between States Parties. In light of rapid advancements in biotechnology since the CBMs were introduced; increasing concern over the use of these technologies by terrorist groups; as well as the presence of previous measures that were proposed but never adopted, 'Form H' has a critical role to play in ensuring that the CBMs remain relevant over time. Although Table 10 outlines a number of proposals, these proposals should be thought of as a preliminary list to be added to as necessary.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.10, ed. Geissler, 1990	• Add prohibitions/provisions related to recombinant DNA research and military misuse of biotechnology
SIPRI Chemical and Biological Warfare Studies No.12, ed. Lundin, 1991	• Add form that requests information on vaccine development and inoculation programmes of armed forces • Add form that requests information on military contracts directly related to the Convention
Germany BWC/CONF.III/17 24 September 1991	• Add form that requests information on open-air release of microorganisms, viruses or simulants for the purposes of defensive threat assessment, testing of detection equipment and decontamination procedures/equipment • As a basis for consideration Germany has prepared a provisional form that requests information on every such release, including: the location and approximate area affected; type of microorganism, virus or simulant released; and purpose of release (threat assessment, etc.)
France and Finland BWC/CONF.III/17 24 September 1991	• Add form that requests information on military vaccination programmes • Form would request lists of vaccines (agent/disease vaccinated against) used in 'standard and/or regular peacetime vaccination programmes concerning active-duty military personnel, including conscripts, but excluding *ad hoc*, short-notice vaccinations for military personnel on special assignment (such as United Nations peace-keeping duties)'
South Africa BWC/CONF.V/COW/WP.1 16 November 2001	• Add form that requests information on plant inoculant and biocontrol agent production facilities • As a basis for consideration, South Africa has prepared a provisional 'Form H' that requests information on name of facility; location (mailing address); and general description of products produced
RGBAC, Isla, Occasional Paper No.3, March 2007	• Add form that requests information on facilities undertaking activities involving the aerosolization of biological materials • Proposed title: 'Exchange of information on biological aerosol facilities' • As a basis for consideration, the RGBAC has prepared a complete set of revised CBM Forms, including a provisional 'Form H'
Pugwash Study Group, Hart, Discussion Paper, November 2008	• Maintain and strengthen the relevance of CBM formats to clarify possible threats posed by non-state actors • Revise CBM formats to better reflect scientific and technological developments to achieve a better understanding of the verification or compliance implications of industry and scientific research activities

Table 10: Proposed addition of new forms ('Form H')

2. Improve the usability of the CBM forms

There have been a number of suggestions to streamline the CBM forms and make them more intuitive or user-friendly. It is believed that such measures would make data entry easier and faster, thus helping States Parties complete their submissions and fulfill their CBM obligations.

Proposals to improve the usability of CBM forms typically suggest redesigning their format, introducing more tables, tick-boxes, arrows and multiple-choice questions. Such measures, and similar simple modifications to the structure and layout of the forms, would allow collators to more easily navigate the forms and help standardize the reporting process. Other proposals suggest introducing guidelines and addressing the question of translation to facilitate completion by countries currently struggling to make submissions. Table 11 outlines these proposals.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.10, ed. Geissler, 1990	• Request that the DDA translate CBM submissions into English
The Royal Society, Scientific Aspects of Control of BW, July 1994	• Design simplified CBM forms, requesting only essential information (e.g. under CBM A names of agents and work on delivery systems in defence programmes)
Canada BWC/CONF.VI/PC/INF.1 10 April 2006	• Develop user-friendly CBM forms, making greater use of tick-boxes rather than requiring written entries, helping to overcome language barriers
Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru and Uruguay BWC/CONF.VI/WP.12 20 October 2006	• Review existing measures and their format • Develop guidelines for enhancement of their implementation • Examine the desirability of creating new forms with a more readable format, independent of the language in which the forms are presented
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Expand use of multiple-choice questionnaires
Switzerland in consultation with JACKSNNZ BWC/CONF.VI/WP.14 15 November 2006	• Streamline forms, clarifying what information is required and where, and introducing simple measures such as arrows and tick-boxes to make it easier and faster to navigate forms
South Africa BWC/CONF.VI/WP.21 20 November 2006	• Develop new, user-friendly, CBM formats • Address issue of translation to ensure wider availability in all languages
Switzerland BWC/CONF.VI/WP.37 8 December 2006	• Make CBM forms user-friendly and minimise ambiguities • As a basis for consideration, Switzerland has prepared a complete set of revised CBM forms
RGBAC, Isla, Occasional Paper No.3, March 2007	• Introduce more tick-boxes, making answers more easily interpreted and minimising the need for translation, or provide a short translation guide to language used in tables, making interpretation clearer • Request that the UN translate submissions, or encourage States to submit their CBMs in more than one UN language or to make their national translations of other States' CBMs available

Table 11: Proposals to improve usability of CBM forms

3. Modernise the reporting process

Building on proposals to improve the usability of the CBM forms, a number of proposals have been made to modernise the reporting process, encouraging the development and use of a comprehensive web-based information management system. It is believed that this measure would make data entry easier; standardise submissions; accelerate the circulation of information; make CBMs more widely accessible; and ultimately increase the quality and quantity of information provided by States Parties. Although the ISU has made considerable strides in this area (e.g. through the creation of a website dedicated to CBMs), further measures to integrate the use of computer-based online resources would improve the functioning of the CBM mechanism. The proposals outlined in Table 12 touch on some of the measures the ISU has already developed and introduces others that seek to further modernise the CBM process.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.12, ed. Lundin, 1991	• Encourage States Parties to agree on measures to make the information exchange system more efficient
Hungary BWC/CONF.III/17 24 September 1991	• Change structure of reporting system in order to make it easily adaptable to computerised data processing, providing for such processing and granting access to its results for each State Party
Canada BWC/CONF.VI/PC/INF.1 10 April 2006	• Distribute CBMs electronically through a CD-ROM or on a secure website
Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru and Uruguay BWC/CONF.VI/WP.12 20 October 2006	• Make CBM forms available in electronic format
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Introduce computerised CBM forms (with or without multiple choice questionnaires) that would allow for faster and easier circulation of declarations
Switzerland in consultation with JACKSNNZ BWC/CONF.VI/WP.14 15 November 2006	• Make CBM forms more accessible, working towards an electronic, web-based, information management system • Adopt an electronic CBM tool for data submissions similar to Chemical Weapons Convention (CWC)
Hunger and Isla, Disarmament Forum No.3, 2006	• Provide choice over submitting and receiving CBMs electronically or on paper • Develop electronic database to help ease access to completed CBMs • Encourage States to make their CBMs freely available online
RGBAC, Isla, Occasional Paper No.3, March 2007	• Provide the opportunity to receive CBMs electronically • Send CBM forms directly to designated contact point • Distribute CBMs through an open or protected website
Lentzos, Preparing the Ground for the CBM Content Debate, Swiss-Funded Study, December 2008	• Develop electronic submission forms and a user-friendly, web-based, information management system • Adopt electronic tick-boxes and pull-down menus to simplify data entry and to improve the visibility of key data • Adopt help functions and indicators to signal where to go next or where data still needs to be filled in

Table 12: Proposals to modernise the reporting process

4. Improve national data collection processes

The CBM data collection process can be difficult and time-consuming, particularly for States Parties preparing CBM submissions for the first time.

Moreover, there are significant differences between States Parties in their ability to obtain the required information due to disparities in resources, legal powers and language requirements, putting some countries at an even greater disadvantage and contributing to chronically low levels of CBM participation and incomplete and/or inaccurate CBM submissions.

In an effort to address these deficiencies, there have been a number of proposals to improve national data collection processes. Table 13 outlines these proposals, including calls to provide data collection guides; previously filled out CBM forms; and regional workshops on data collection and collation techniques.

Proposed by	Proposed modifications
Canada Department of Foreign Affairs and International Trade, CBMs: A Guide to Their Completion, CD-ROM	• Canada has prepared a detailed guide on CBMs, offering advice on how to compile data and making submissions available to States Parties for downloading • With this guide, Canada also includes their 2003 CBM submission, which can serve as a template for other States Parties to follow
SIPRI Chemical and Biological Warfare Studies No.10, ed. Geissler, 1990	• Encourage States Parties to establish national bodies and procedures to perform CBM duties
Switzerland in consultation with JACKSNNZ BWC/CONF.VI/WP.14 15 November 2006	• Improve national implementation to ensure comprehensive, regular and timely submissions
Canada BWC/CONF.VI/PC/INF.1 10 April 2006	• Encourage States Parties to submit CBMs on an annual basis, completed accurately and in a timely manner • Promote action on national implementation and encourage, in particular, the development of specific goals, time lines and methodologies to facilitate effective implementation • Encourage States Parties to report on their progress in passing national implementation legislation on a regular basis, such as at annual meetings • Encourage those in States Parties that are in a position to do so to provide implementation support to other States Parties
Hunger and Isla, HCBAC, Disarmament Forum No.3, 2006	• Provide technical assistance to States that struggle with collecting declarable data, completing and submitting CBMs • Develop international and regional workshops on CBM reporting or an e-mail helpline • Focus efforts on 'particularly important States': depositary States; countries that have had bioweapons programmes; countries that have been officially accused of biological efforts; and global and regional leaders in biotechnology
RGBAC, Isla, Occasional Paper No.3, March 2007	• Make CBM compilation assistance part of national or international efforts to strengthen the BWC • Encourage less experienced countries to monitor and follow the practices of more experienced countries • Promote international workshops that outline improved methods for data collection and collation • Introduce telephone or email hotlines to offer collection and collation

	assistance • Develop a task group that could tutor data compilation in countries requesting assistance
Lentzos and Woodward, National Data Collection Processes for CBM Submissions, Swiss-Funded Study, December 2007	• Encourage collators to help other collators, both those in States starting the process for the first time and those in States which have been submitting returns for some time but who may have specific questions on ways to improve data collection
Switzerland BWC/MSP/2007/WP.11 7 January 2008; BWC/MSP/2008/MX/WP.5 30 July 2008	• Promote improved collator rotation through use of up-to-date handover notes and close working relationships between predecessors/successors and technical experts • Develop guides on how to complete forms; provide copies of previously filled out forms; translate forms into the national language to avoid language problems; visit premises in person; hold seminars on a regular or one-off basis, etc.

Table 13: Proposals to improve national data collection processes

5. Make administrative improvements

Since the inauguration of the CBM mechanism, there has been a number of proposals to establish an administrative task force to facilitate the CBM information exchange.

Some of these proposals have now been realized in the Implementation Support Unit (ISU), which was officially launched on 20 August 2007. The ISU is mandated to assist States Parties in the following ways: (a) receive and distribute CBMs; (b) send information notices regarding annual submissions; (c) compile and distribute data on CBMs and CBM participation; (d) develop and maintain a secure website on CBMs; (e) serve as an information exchange point for assistance related to the preparation of CBMs; and (f) facilitate activities to promote participation in the CBM process.

Table 14 outlines proposals that led to or further encourage the work of the ISU. Although elements of these proposals have now been satisfied, taken together they suggest a strong interest in a more permanent CBM administrative task force.

Proposed by	Proposed modifications
Yugoslavia BWC/CONF.III/17 24 September 1991	• Establish a unit of the UN secretariat that would follow-up on the fulfillment of States Parties' CBM obligations
The Royal Society, Scientific Aspects of Control of Biological Weapons, July 1994	• Establish an administrative office that would issue reminders and follow-up on non-participating State Parties; correlate information in relation to laying a basis for verification; receive and collate intelligence information if it became available; monitor open-source publications (CBM C); receive and analyse information on exchange visits between staff of appropriate institutes (CBM D); advise countries on filling in CBM forms; and circulate CBM submissions
Hunger, Key Points for Fourth Review Conference September 1996	• Request that the DDA perform all activities related to CBMs, including: collection, distribution and analysis
SIPRI Chemical and Biological Warfare Studies No.19, ed. Sims, 2001	• Create incentive for States Parties to submit annual declarations by offering an annual review of CBM returns and additional compliance reports that is only open to CBM-participating States • States that do not make the 15 April deadline forfeit the opportunity to evaluate the quality and quantity of other States' data
Findlay and Woodward, Weapons of Mass Destruction Commission No.23, October 2004	• Establish a CBM Unit to enhance support for CBM process
Canada BWC/CONF.VI/PC/INF.1 10 April 2006	• Establish BWC secretariat or implementation support unit to carry out specific activities, including providing enhanced support for CBMs in the form of reminders; assistance; and annual summaries
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Request that the DDA send out pre and post 15 April reminders • Invite States Parties to designate a contact point to which reminders can be sent • Request that the UN Secretary-General (UNSG) send out January reminders

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru and Uruguay BWC/CONF.VI/WP.12 20 October 2006	• Establish a panel of governmental experts to assist in CBM duties • Provide assistance when requested in devising, presenting and implementing CBMs
Switzerland in consultation with JACKSNNZ BWC/CONF.VI/WP.14 15 November 2006	• Define stronger role for the DDA, allowing it to: raise awareness of States Parties and promote and explain the CBM system, jointly with States in a position to assist other States Parties; issue annual reminders to submit forms; act as intermediary between States requesting assistance and those offering assistance; verify plausibility of information submitted, clarify ambiguities and request missing pages; and provide basic statistics on CBM participation
RGBAC, Isla, Occasional Paper No.3, March 2007	• Create a permanent BWC task force, which will address all matters related to the Convention, including CBMs and CBM reform: provide a stronger collection mandate for the DDA, allowing it to issue CBM reminders and make inquiries and allow the DDA to conduct low-level (e.g. an annual participation summary), mid-level (e.g. a summary of the declared data reducing the large amount of information into several pages, which can be easily reviewed) and high-level (e.g. verification of information declared in CBMs) analysis of CBMs
Pugwash Study Group, Littlewood, Background Paper, November 2008	• Consider practical enhancements to the ISU in terms of staffing, mandate and outreach activities

Table 14: Proposals to improve CBM administration

6. Promote cooperation between States Parties

In keeping with the aims of the CBMs, and the implementation of the BWC, increased cooperation between States Parties stands to bring countries closer together; harmonize efforts to promote the peaceful and productive use of biology; increase transparency and build trust.

Given the fundamental importance of cooperation, a number of proposals have been made to promote and improve contact between States Parties. These proposals are generally concerned with raising awareness of the CBM mechanism through bilateral and multilateral dialogue; regional forums; and other cooperative efforts that seek to promote the exchange of information, researchers, and best practices. Table 15 outlines these proposals in more detail.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.12, ed. Lundin, 1991	• Take actions to enhance exchange of scientists on a long-term basis, especially between facilities involved in research directly related to the BWC
Hungary BWC/CONF.III/17 24 September 1991	• Encourage States Parties, which are ready to do so, to open their declared facilities on a reciprocal basis to verify on-site the information provided in their CBMs
BWC/AD HOC GROUP/WP.85, 26 July 1996	• Promote the exchange of information between States Parties (BWC as "hub"): establish electronic networking on issues relating to materials and activities of potential relevance to the BWC; video conference connectivity/network to support information sharing; and 'virtual' attendance at scientific conferences
BWC/AD HOC GROUP/WP.86, 26 July 1996	• Promote voluntary confidence-building visits to demonstrate transparency in matters related to the BWC and to foster the mutually beneficial exchange of information and technology between participating States Parties
BWC/AD HOC GROUP/WP.87, 26 July 1996	• Encourage bilateral and/or multilateral visits of experts to comparable facilities between States Parties on a voluntary and/or reciprocal basis and bilateral/multilateral scientific exchanges where common interest exists between countries, covering all areas directly related to the BWC
France BWC/MSP/2004/MX/WP.55 28 July 2004	• Promote and improve international laboratory networks and cooperation
France on behalf of the European Union BWC/CONF.VI/WP.4 20 October 2006	• Encourage States Parties that are in a position to do so to support other States Parties that request assistance in returning their CBM forms
Switzerland in consultation with JACKSNNZ BWC/CONF.VI/WP.14 15 November 2006	• Raise awareness of States Parties and promote and explain the CBM system, jointly with States in a position to assist other States Parties
RGBAC, Isla, Occasional Paper No.3, March 2007	• Raise awareness with regard to the importance of CBM participation through regional promotional workshops and other appropriate events • Promote voluntary multilateral on-site validation visits • Encourage States Parties who wish to establish a precedent for cooperation and transparency to offer and attend visits of this kind
VERTIC, Research Report No.6, October 2006	• Take action to implement the BWC through regional forums initiated by States Parties

Littlewood, Canadian Centre for Treaty Compliance (CCTC), 2008	• Encourage States Parties to provide assistance to other States Parties that are experiencing legitimate difficulties submitting annual CBM forms
Pugwash Study Group, Hart, Discussion Paper, November 2008	• Consider incorporating select consultation, clarification and fact-finding measures into the CBM structure (e.g. by agreeing to a political statement supporting a process of clarification among interested parties at the margins using such measures)

Table 15: Proposals to promote cooperation between States Parties

7. Invite civil society groups and international organisations to play a role in the CBM process

There have been a number of proposals to invite civil society groups and international organisations to play a role in the CBM process. Civil society groups are said to have the potential to contribute significantly to the oversight and development of the CBMs, as such groups are free to set their own agenda and could propose novel ideas towards the betterment of the CBM process. International organisations, such as the WHO, are said to have the potential to interface with the BWC, drawing on a wealth of epidemiological data and expert insight that could either substitute certain CBM measures or simply support CBM duties. Table 16 outlines a number of proposals that seek to incorporate the energy and expertise of each of these groups, enhancing the effectiveness of CBMs.

Proposed by	Proposed modifications
SIPRI Chemical and Biological Warfare Studies No.10, ed. Geissler, 1990	• Encourage international organisations and non-governmental organisations (NGOs) to participate in the CBM information exchange and announce forthcoming meetings, exchanges of scientists, etc. • Encourage scientists, universities and scientific societies to declare that they will not participate in offensive biological weapons programmes • Request that the WHO collect, evaluate and distribute data submitted by States Parties on containment labs and disease outbreaks
SIPRI Chemical and Biological Warfare Studies No.12, ed. Lundin, 1991	• Request that information on facilities, outbreaks, conferences, publications, and exchange programmes be fed into a central database with the WHO, or a similar agency, which could be accessed by States Parties at any time instead of requesting information in voluminous and lengthy reports
BWC/AD HOC GROUP/WP.85, 26 July 1996	• Promote the exchange of information between States Parties and international organizations (BWC as “hub”): monitor databases that track unusual disease outbreaks in humans (e.g. WHO Weekly Epidemiological Record); animals (e.g. OIE Disease Information); and plants (e.g. joint FAO/OIE/WHO questionnaire)
VERTIC, Research Report No.6, October 2006	• Liaise with other intergovernmental organisations
Hunger and Isla, HCBAC, Disarmament Forum No.3, 2006	• Make electronic CBM database available to non-governmental experts to increase possibilities for CBM analysis and assessment
Pugwash Study Group, Jefferson, Report, December 2007	• Build synergy with other international organisations • Increase inclusiveness of academic and research institutions and NGOs • Improve transparency through open dialogue with industry
Canadian Centre for Treaty Compliance, Littlewood, Compliance Chronicles No.6, July 2008	• Grant civil society groups (including NGOs, professional scientific bodies, industry and other non-state actors) greater access to CBM information • Work with these groups to address problems with the CBM mechanism and consider possible solutions
Pugwash Study Group, Littlewood, Background Paper, November 2008	• Encourage civil society groups to start a collaborative website (e.g. a ‘Wiki’) that would permit them to think about and test various ideas, policy proposals and possible solutions that would help prepare the ground for a successful conference in 2011

Table 16: Proposals to invite civil society groups and international organisations to play a role in the CBM process

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Annex I (BWC/CONF.III/23): Agreed Forms for the Submission of CBMs from the Final Declaration of the Third Review Conference

At the Third Review Conference it was agreed that all States Parties present the following declaration:

1. Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange

Measure	Nothing to declare	Nothing new to declare
A, part 1	☐	☐
A, part 2 (i)	☐	☐
A, part 2 (ii)	☐	☐
A, part 2 (iii)	☐	☐
B (I)	☐	☐
B (ii)	☐	☐
C	☐	☐
D	☐	☐
E	☐	☐
F	☐	☐
G	☐	☐

(Please mark the appropriate box(es) for each measure, with a tick.)

Date: _____

State Party to the Convention: _____

2. CONFIDENCE-BUILDING MEASURE AA≅:

Part 1: Exchange of data on research centres and laboratories

At the Third Review Conference it was agreed that States Parties continue to implement the following:

> AExchange of data, including name, location, scope and general description of activities, on research centres and laboratories that meet very high national or international safety standards established for handling, for permitted purposes, biological materials that pose a high individual and community risk or specialize in permitted biological activities directly related to the Convention.≅

Modalities

The Third Review Conference agreed that data should be provided by States Parties on each facility, within their territory or under their jurisdiction or control anywhere, which has any maximum containment laboratories meeting those criteria for such maximum containment laboratories as specified in the 1983 WHO Laboratory Biosafety Manual such as those designated as biosafety level 4 (BL4) or P4 or equivalent standards.

Form A, part 1

Exchange of data on research centres and laboratories[1]

1. Name(s) of facility[2] _____

2. Responsible public or private organization or company _____
_____

3. Location and postal address _____
_____
_____
_____

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

_____

5. Number of maximum containment units[3] within the research centre and/or laboratory, with an indication of their respective size (m^2)

_____

6. If no maximum containment unit, indicate highest level of protection

_____

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

_____
_____
_____

[1] The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

[2] For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark ADeclared in accordance with Form A, part 2 (iii)≅.

[3] In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Part 2: Exchange of information on national biological defence research and development programmes

At the Third Review Conference it was agreed that States Parties are to implement the following:

In the interest of increasing the transparency of national research and development programmes on biological defence, the States Parties will declare whether or not they conduct such programmes. States Parties agreed to provide, annually, detailed information on their biological defence research and development programmes including summaries of the objectives and costs of effort performed by contractors and in other facilities. If no biological defence research and development programme is being conducted, a Anull≅ report will be provided.

States Parties will make declarations in accordance with the attached forms, which require the following information:

(1) the objective and summary of the research and development activities under way indicating whether work is conducted in the following areas: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research;

(2) whether contractor or other non-defence facilities are utilized and the total funding provided to that portion of the programme;

(3) the organizational structure of the programme and its reporting relationships; and

(4) the following information concerning the defence and other governmental facilities in which the biological defence research and development programme is concentrated;

(a) location;
(b) the floor areas (sqM) of the facilities including that dedicated to each of BL2, BL3 and BL4 level laboratories;
(c) the total number of staff employed, including those contracted full time for more than six months;
(d) numbers of staff reported in (c) by the following categories: civilian, military, scientists, technicians, engineers, support and administrative staff;
(e) a list of the scientific disciplines of the scientific/engineering staff;
(f) the source and funding levels in the following three areas: research, development, and test and evaluation; and
(g) the policy regarding publication and a list of publicly-available papers and reports.

Form A, part 2 (i)

National biological defence research and development programme Declaration

Is there a national programme to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a programme would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

Yes/No

If the answer is Yes, complete Form A, part 2 (ii) which will provide a description of the programme.

Form A, part 2 (ii)

National biological defence research and development programme

Description

1. State the objectives and funding of the programme and summarize the principal research and development activities conducted in the programme. Areas to be addressed shall include: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

2. State the total funding for the programme and its source.

3. Are aspects of this programme conducted under contract with industry, academic institutions, or in other non-defence facilities?

Yes/No

4. If yes, what proportion of the total funds for the programme is expended in these contracted or other facilities?

5. Summarize the objectives and research areas of the programme performed by contractors and in other facilities with the funds identified under paragraph 4.

6. Provide a diagram of the organizational structure of the programme and the reporting relationships (include individual facilities participating in the programme).

7. Provide a declaration in accordance with Form A, part 2 (iii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to the national biological defence research and development programme, within the territory of the reporting State, or under its jurisdiction or control anywhere.

National biological defence research and development programme

Facilities

Complete a form for each facility declared in accordance with paragraph 7 in Form A, part 2 (ii).

In shared facilities, provide the following information for the biological defence research and development portion only.

1. What is the name of the facility?

2. Where is it located (include both address and geographical location)?

3. Floor area of laboratory areas by containment level:

   BL2 _____ (sqM)

   BL3 _____ (sqM)

   BL4 _____ (sqM)

   Total laboratory floor area _____ (sqM)

4. The organizational structure of each facility.

   (I) Total number of personnel _____

   (ii) Division of personnel:

   Military _____

   Civilian _____

   (iii) Division of personnel by category:

   Scientists _____

   Engineers _____

   Technicians _____

   Administration and support staff _____

   (iv) List the scientific disciplines represented in the scientific/ engineering staff.

   (v) Are contractor staff working in the facility? If so, provide an

approximate number.

(vi) What is (are) the source(s) of funding for the work conducted in the facility, including indication if activity is wholly or partly financed by the Ministry of Defence?

(vii) What are the funding levels for the following programme areas:

Research _____

Development _____

Test and evaluation _____

(viii) Briefly describe the publication policy of the facility:

(ix) Provide a list of publicly-available papers and reports resulting from the work during the previous 12 months. (To include authors, titles and full references.)

5. Briefly describe the biological defence work carried out at the facility, including type(s) of micro-organisms[4] and/or toxins studied, as well as outdoor studies of biological aerosols.

[4] Including viruses and prions.

3. CONFIDENCE-BUILDING MEASURE AB≅:

Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins

At the Third Review Conference it was agreed that States Parties continue to implement the following:

Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins, and on all such events that seem to deviate from the normal pattern as regards type, development, place, or time of occurrence. The information provided on events that deviate from the norm will include, as soon as it is available, data on the type of disease, approximate area affected, and number of cases.

Modalities

The Third Review Conference agreed the following definition:

An outbreak or epidemic is the occurrence of an unusually large or unexpected number of cases of an illness or health-related event in a given place at a given time. The number of cases considered as unusual will vary according to the illness or event and the community concerned.

Furthermore, reference was made to the following definitions:

An epidemic of infectious disease is defined as the occurrence of an unusually large or unexpected number of cases of a disease known or suspected to be of infectious origin, for a given place and time. It is usually a rapidly evolving situation, requiring a rapid response (WHO internal document CDS/Mtg/82.1).

The occurrence in a community or region of cases of an illness, specific health-related behaviour, or other health-related events clearly in excess of normal expectancy. The community or region, and the time period in which the cases occur, are specified precisely. The number of cases indicating the presence of an epidemic will vary according to the agent, size and type of population exposed, previous experience or lack of exposure to the disease, and time and place of occurrence: epidemicity is thus relative to usual frequency of the disease in the same area, among the specified population, at the same season of the year. A single case of a communicable disease long absent from a population or first invasion by a disease not previously recognized in that area requires immediate reporting and full field investigation: two cases of such a disease associated in time and place may be sufficient evidence to be considered an epidemic. (J.M. Last, A Dictionary of Epidemiology, Oxford University Press, New York, Oxford, Toronto, 1983.)

The Third Review Conference agreed on the following:

1. In determining what constitutes an outbreak States Parties are recommended to take guidance from the above.

2. Since no universal standards exist for what might constitute a deviation from the normal pattern, States Parties agreed to utilize fully existing national reporting systems on human diseases as well as animal and plant diseases, where possible, and systems within the WHO to provide annual update of background information on diseases caused by organisms which meet the criteria for risk groups II, III and IV according to the classification in the 1983 WHO Laboratory Biosafety Manual, the occurrence of which, in their respective areas, does not necessarily constitute a deviation from normal patterns.[5]

3. Exchange of data on outbreaks that seem to deviate from the normal pattern is considered particularly important in the following cases:

- when the cause of the outbreak cannot be readily determined or the causative agent[6] is difficult to diagnose,

- when the disease may be caused by organisms which meet the criteria for risk groups III or IV, according to the classification in the 1983 WHO Laboratory Biosafety Manual,

- when the causative agent is exotic to a given region,

- when the disease follows an unusual pattern of development,

- when the disease occurs in the vicinity of research centres and laboratories subject to exchange of data under item A,

- when suspicions arise of the possible occurrence of a new disease.

4. In order to enhance confidence, an initial report of an outbreak of an infectious disease or a similar occurrence that deviate from the normal pattern should be given promptly after cognizance of the outbreak and should be followed up by annual reports.

To enable States Parties to follow a standardized procedure, the Conference has agreed that Form B (ii) should be used, to the extent information is known and/or applicable, for the exchange of initial as well as annual information.

5. In order to improve international cooperation in the field of peaceful bacteriological (biological) activities and in order to prevent or reduce the occurrence of ambiguities, doubts and suspicions, States Parties are encouraged to invite experts from other States Parties to assist in the handling of an outbreak, and to respond favourably to such invitations.

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[5] This information should be provided in accordance with Form B (I).

[6] It is understood that this may include organisms made pathogenic by molecular biology techniques, such as genetic engineering.

Form B (I)

Background information on outbreaks of reportable infectious diseases

Disease		Number of cases per year			
	1988	1989	1990	1991	1992

Form B (ii)

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern

1. Time of cognizance of the outbreak .....

2. Location and approximate area affected .....

3. Type of disease/intoxication .....

4. Suspected source of disease/ intoxication .....

5. Possible causative agent(s) .....

6. Main characteristics of systems .....

7. Detailed symptoms, when applicable .....

   - respiratory .....
   - circulatory .....
   - neurological/behavioural .....
   - intestinal .....
   - dermatological .....
   - nephrological .....
   - other .....

8. Deviation(s) from the normal pattern as regards

   - type .....
   - development .....
   - place of occurrence .....
   - time of occurrence .....
   - symptoms .....
   - virulence pattern .....
   - drug resistance pattern .....
   - agent(s) difficult to diagnose .....
   - presence of unusual vectors .....
   - other .....

9. Approximate number of primary cases .....

10. Approximate number of total cases .....

11. Number of deaths .....

12. Development of the outbreak .....

13. Measures taken .....

4. CONFIDENCE-BUILDING MEASURE AC≅:

- Encouragement of publication of results and promotion of use of knowledge

At the Third Review Conference it was agreed that States parties continue to implement the following:

AEncouragement of publication of results of biological research directly related to the Convention, in scientific journals generally available to States parties, as well as promotion of use for permitted purposes of knowledge gained in this research.≅

Modalities

The Third Review Conference agreed on the following:

1. It is recommended that basic research in biosciences, and particularly that directly related to the Convention should generally be unclassified and that applied research to the extent possible, without infringing on national and commercial interests, should also be unclassified.

2. States parties are encouraged to provide information on their policy as regards publication of results of biological research, indicating, *inter alia*, their policies as regards publication of results of research carried out in research centres and laboratories subject to exchange of information under item A and publication of research on outbreaks of diseases covered by item B, and to provide information on relevant scientific journals and other relevant scientific publications generally available to States parties.

3. The Third Review Conference discussed the question of cooperation and assistance as regards the safe handling of biological material covered by the Convention. It concluded that other international forums were engaged in this field and expressed its support for efforts aimed at enhancing such cooperation.

5. CONFIDENCE-BUILDING MEASURE AD≅

- Active promotion of contacts

At the Third Review Conference it was agreed that States parties continue to implement the following:

> AActive promotion of contacts between scientists, other experts and facilities engaged in biological research directly related to the Convention, including exchanges and visits for joint research on a mutually agreed basis.≅

Modalities

The Third Review Conference agreed on the following:

In order to actively promote professional contacts between scientists, joint research projects and other activities aimed at preventing or reducing the occurrence of ambiguities, doubts and suspicions and at improving international cooperation in the field of peaceful bacteriological (biological) activities, States parties are encouraged to provide information, to the extent possible:

- on planned international conferences, seminars, symposia and similar events dealing with biological research directly related to the Convention,

- on other opportunities for exchange of scientists, joint research or other measures to promote contacts between scientists engaged in biological research directly related to the Convention.

To enable States parties to follow a standardized procedure, the Third Review Conference has agreed that Form D should be used for exchange of information under this item.

Form D

Active promotion of contacts

1. Planned international conferences, symposia, seminars, and other similar forums for exchange

For each such event, the following information should be provided:

- name of the conference, etc. .....
- arranging organization(s), etc. .....
- time .....
- place .....
- main subject(s) for the conference, etc. .....

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- conditions for participation .....

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- point of contact for further information, registration, etc. .....

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2. Information regarding other opportunities

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6. CONFIDENCE-BUILDING MEASURE AE≅

- Declaration of legislation, regulations and other measures

At the Third Review Conference the States parties agreed to implement the following:

As an indication of the measures which they have taken to implement the Convention, States parties shall declare whether they have legislation, regulations or other measures:

(a) to prohibit the development, production, stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery, specified in Article I of the Convention, within their territory or anywhere under their jurisdiction or control;

(b) in relation to the export or import of micro-organisms pathogenic to man, animals and plants or of toxins in accordance with the Convention;

States parties shall complete the attached form (Form E) and shall be prepared to submit copies of the legislation or regulations, or written details of other measures on request to the United Nations Department for Disarmament Affairs or to an individual State party. On an annual basis States parties shall indicate, also on the attached form, whether or not there has been any amendment to their legislation, regulations or other measures.

Form E

Declaration of legislation, regulations and other measures

Relating to	Amended measures since last year	Legislation	Regulations	Other
(a)	Development, production stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I Yes/No	Yes/No	Yes/No	Yes/No
(b)	Exports of micro-organisms[7] and toxins Yes/No	Yes/No	Yes/No	Yes/No
(c)	Imports of micro-organisms[7] and toxins Yes/No	Yes/No	Yes/No	Yes/No

[7] Micro-organisms pathogenic to man, animals and plants in accordance with the Convention.

7. CONFIDENCE-BUILDING MEASURE AF≅:

- Declaration of past activities in offensive and/or defensive biological research and development programmes

In the interest of increasing transparency and openness, States parties shall declare whether or not they conducted any offensive and/or defensive biological research and development programmes since 1 January 1946.

If so, States parties shall provide information on such programmes, in accordance with Form F.

Form F

Declaration of past activities in offensive and/or defensive biological research and development programmes

1. Date of entry into force of the Convention for the State party.

2. Past offensive biological research and development programmes:

   - Yes - No

   - Period(s) of activities

   - Summary of the research and development activities indicating whether work was performed concerning production, test and evaluation, weaponization, stockpiling of biological agents, the destruction programme of such agents and weapons, and other related research.

3. Past defensive biological research and development programmes:

   - Yes - No

   - Period(s) of activities

   - Summary of the research and development activities indicating whether or not work was conducted in the following areas: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination, and other related research, with location if possible.

8. CONFIDENCE-BUILDING MEASURE AG≅

- Declaration of vaccine production facilities

To further increase the transparency of biological research and development related to the Convention and to broaden scientific and technical knowledge as agreed in Article X, each State party will declare all facilities, both governmental and non-governmental, within its territory or under its jurisdiction or control anywhere, producing vaccines licensed by the State party for the protection of humans. Information shall be provided on Form G attached.

Form G

Declaration of vaccine production facilities

1. Name of facility:

2. Location (mailing address):

3. General description of the types of diseases covered